DOCUMENT RESUME

ED 285 327 EC 200 264

AUTHOR Hill, Diane Pagnotto
TITLE PAATCH: Program of Auditory Articulation Therapy for Children.
REPORT NO ISBN-0-88450-982-6
PUB DATE 87
NOTE 62p.
AVAILABLE FROM Communication Skill Builders, 3830 E. Bellevue, P.O. Box 42050, Tuscon, AZ 85733 ($12.95, Catalog No. 7366).
PUB TYPE Guides - Non-Classroom Use (055) -- Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Articulation Impairments; *Auditory Discrimination; *Auditory Training; *Intervention; *Learning Activities; Preschool Children; Preschool Education; *Speech Therapy

ABSTRACT

This manual describes auditory training activities that de-emphasize production work for articulation-impaired preschoolers. The goal of these activities is to remove the burden of producing sounds so that the clinician can train the child's ear so that the child will eventually be ready and able to produce sounds at an age-appropriate level. The activities are best suited for children with no other physical, neurological, or intellectual disabilities and who demonstrate age-appropriate language skills. Working principles for success are listed for clinicians. Four easy introductory activities are presented in the first section. Basic auditory training games and activities are included in Group II activities. Group III activities involve more advanced auditory training games and activities. The fourth group of activities incorporates production training and can be used once the child demonstrates readiness. Referent Program Cards for 21 sounds are included. (CB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED285327

PAATCH: Program of Auditory Articulation Therapy for Children

by Diane Pagnotto Hill

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Debra Smith

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC 200264

BEST COPY AVAILABLE

Catalog No. 7366

© 1987 by

Communication Skill Builders, Inc.®
3830 E. Bellevue/P.O. Box 42050
Tucson, Arizona 85733
(602) 323-7500

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage and retrieval system, without written permission from the Publisher.

ISBN 0-88450-982-6 Catalog No. 7366

10 9 8 7 6 5 4 3 2 1
Printed in the United States of America

DEDICATION

To my husband, David M. Hill, for his initial inspiration to write this book and his constant encouragement, love, and support.

To my parents, Emanuel and Louise J. Pagnotto, for their ongoing love and approval.

To my friend and colleague, Ranier B. Tebbetts, for her inspiration and unsparing assistance and guidance.

ABOUT THE AUTHOR

Diane Pagnotto Hill holds a B.S. in Communication Disorders from Worcester State College in Massachusetts and an M.Ed. in Speech-Language Pathology from Northeastern University. She holds the C.C.C. from the American Speech-Language-Hearing Association.

During her professional career, Ms. Hill has served as a speech-language pathologist, consultant, and coordinator for children in preschool through high school. In addition to providing inservice workshops on speech and language development to preschool teachers, elementary teachers, and college students, she has developed a preschool language program for 3- to 5-year-olds and a language-based program for 6- to 12-year-olds. Ms. Hill is currently a speech-language pathologist for North Middlesex Regional School District in Massachusetts.

CONTENTS

Preface ix

Introduction 1

Materials 5

Working Principles for Success 7

Activities 11
Group I: Introductory Auditory Training Activities 11
Group II: Basic Auditory Training Games and Activities 17
Group III: Advanced Auditory Training Games and Activities 22
Group IV: Production Training Ideas 27

References 33

Appendix 35

PREFACE

The traditional approaches to articulation therapy for unintelligible children tend to be production-oriented. Both distinctive feature therapy and phonological process therapy have a common early objective of eliciting correct production of error sounds. Production-oriented approaches are appropriate for various populations of speech-disordered children and adults. However, it is this author's opinion that such approaches do not serve as the best intervention strategies for unintelligible three- to six-year-old children. In my numerous years as a public school speech/language pathologist, production-oriented approaches proved to me to be inappropriate for use with children three to six years old. The oldest and most widely used method of teaching individual phoneme segments—that of following the normal hierarchy of phoneme development—was essentially ineffective.

Children whose speech is totally unintelligible profit very little by learning to produce correctly three or four sounds; their speech generally remains unintelligible despite this progress. Young children cannot understand any type of production-oriented therapy. Reference to the /b/ sound or the /f/ sound is meaningless to them. Production tasks (such as imitating sounds and imitating words) often not only bore children, but frustrate them as well. In most cases, unintelligible children are aware that when they talk, people don't seem to understand. Yet, such children know what they are saying, and from a semantic/pragmatic viewpoint, are successfully communicating. They wonder why people ask for the statement to be repeated or don't understand. How frustrating for children! How can we as speech/language pathologists ask a child to repeat sounds and words without reinforcing this sense of frustration? I don't think we can. We often ask children to produce or practice sounds which they cannot produce easily—sounds they are not developmentally ready to produce. In my opinion, heavy emphasis on production training, particularly at the onset of therapy, only serves to call unnecessary negative attention to the child's basic difficulty.

During the past several years, I have successfully used the approach outlined in this book with children who have multiple articulation errors. I have found this approach to be a great deal of fun for both the child and the clinician. The first three groups of activities are auditory training activities. These activities train the child's ears on all sounds in error in order to facilitate readiness for correct production of sounds. The fourth and final group of activities, which involves production work, I suggest be used when the child demonstrates readiness for production practice (for example, begins successful sound production). I have found that using these activities, rather than initially emphasizing production work, has positive effects on the child's self-image, because the child feels successful right from the start. There is no pressure to perform, which is a welcomed relief to most young children with speech problems.

In summary, my claim is that the most important phase of therapy for unintelligible three- to six-year-old children is auditory training and discrimination. Intense emphasis on this phase often causes the traditional articulation therapy phases of establishment, transfer, and maintenance to occur spontaneously. Although I believe strongly in this approach, I am fully aware that many speech/language pathologists might be uncomfortable abandoning production work for too long. Therefore, this book is written to accommodate clinicians who would like to incorporate auditory activities into their total therapy plan. The clinician may use this book as a resource by utilizing the auditory training games and activities in whatever manner is most desirable.

INTRODUCTION

Articulation therapy is a continuum of three major phases: establishment, transfer, and maintenance (Bernthal and Bankson 1981). Eliciting correct production of error sounds is the major objective in the establishment phase of therapy. However, many authors advocate the use of auditory training activities prior to production training.

Harris Winitz states that since an articulation problem "involves a breakdown in the conceptualization of underlying phonological structure," auditory discrimination training is the recommended first step: It provides "perceptual experiences that will help a child develop a normal phonological system" (1984, p. 40). He recommends that, to help children realize and understand that their speech patterns are different from the standard patterns of the community, auditory training activities be the initial and sole focus of therapy. He supports using auditory training directed toward the child's entire sound system for a period of several months to a year. Winitz also states that research supports the idea that articulation skills can improve through auditory discrimination training, independent of production training. Van Riper (1972) also argues for extensive and systematic auditory discrimination training prior to production practice. He views ear training as the "necessary perceptual defining of a standard pattern" (p. 212), and stresses the importance of emphasizing listening.

Powers (1971) outlines a six-step program highlighting a variety of auditory discrimination activities to use prior to and during production training. She states that auditory training is a powerful technique which allows the child to develop an awareness of speech sounds. Such an awareness facilitates the development of self-discrimination as well as correct production of speech sounds. She also promotes the use of sound referents; giving each sound a name (such as the "snake sound" for /s/) to clearly establish the identity of the sound for the child.

Eisenson (1972) recommends an extensive program of auditory discrimination or "speech-sound processing" prior to production activities. Berry and Eisenson (1956) suggest that auditory stimulation will develop the child's awareness of specific speech sounds. They recommend bombarding the child with the target sounds by simple repetition, and they provide an extensive list of auditory discrimination activities to use in therapy.

The earliest support for auditory activities may be the "stimulus method"—an auditory training approach that was developed more than fifty years ago for use with functional articulation cases (Travis 1931). More currently, even authors who advocate production-oriented methods believe that auditory discrimination training should not be totally abandoned. Ingram (1976) states that it may be unrealistic to desert entirely auditory training, particularly when the child demonstrates perceptual confusion between sounds. Hodson and Paden (1983) submit that since the sense of hearing is the primary channel through which most children learn to speak, it would seem logical that the unintelligible child might "profit from attending to the audible characteristics of sounds" (p. 49). They postulate that an unintelligible child may need "more concentrated or emphasized auditory stimulation" than a child without phonological problems, and they incorporate "auditory bombardment" activities into every therapy session (p. 50).

Perhaps Monnin (1984) best substantiates the necessity of auditory training activities in her analysis of the relationship between articulation errors and speech sound discrimination for children with functional articulation problems. She states that the relationship between articulatory proficiency and auditory discrimination ability has been studied and discussed for more than fifty years. Although there are no easy answers and much of the research is inconclusive, one fact remains clear: "When speech sound discrimination performance is viewed as being specific or selective to the sound or sounds the child misarticulates, then a positive, consistent relationship can be established" (p. 18).

The activities described in this book are auditory training activities that de-emphasize production work. These training activities may be used with three- to six-year-old children who demonstrate multiple (more than six) articulation errors. By removing the burden of producing sounds, the clinician can train the child's ear so that the child will eventually be ready and able to produce sounds at an age-appropriate level. The activities are

particularly useful when the child demonstrates poor or fair sound stimulability. With children who are stimulable on the correct production of error sounds, the activities can be used to facilitate the normal developmental process. The activities are best suited for children who are normal (physically, neurologically, and intellectually) and who demonstrate age-appropriate language comprehension skills. However, the activities can also be used successfully when language skills are delayed or other impairments exist.

These activities can be implemented in group or individual therapy. Both types of scheduling have advantages. In individual therapy the clinician can concentrate on one child, which is helpful in the case of a very distractible child. In the majority of cases, however, individual therapy is not necessary, particularly since these activities are not production-oriented. (A group of children can use their ears to listen simultaneously, but they cannot use their mouths to practice words simultaneously.) Because these activities predominantly involve auditory training, they lend themselves well to group therapy. Additionally, the enthusiasm of one child in a group tends to be contagious. That enthusiasm sometimes causes a shy child to participate more readily.

The three groups of auditory training activities are listed here in hierarchical sequence from least to most difficult. Group I involves easy introductory activities. Basic auditory training games and activities are included in Group II. Group III involves more advanced auditory training games and activities. The activities in Group I need to be presented in the order in which they appear. In Groups II and III, the clinician may pick and choose activities unless otherwise specified. The fourth group of activities incorporates production training and can be used once the child demonstrates readiness. In general, the activities are practical. Since phonemes are abstractions (McReynolds and Engmann 1975), referents for sounds are used to help the child make and retain meaningful associations and to diminish the abstract nature of phonemes. Also, nearly every activity involves the use of whole words (as opposed to sounds in isolation or in syllables) which are part of the child's vocabulary. It is important to provide modeling and reinforcement within the context of the child's own world (Holland 1975; Snyder 1980). As sounds in error are introduced, it is suggested that meaningful words beginning with the error sounds be presented (such as body parts, clothing, or other items in the immediate environment).

The Appendix lists example words for each of the sounds. In addition to the pragmatic orientation, these activities often help to build sound-symbol correspondence and metalinguistic awareness. The children become tuned in to sounds in general, learn to quickly and accurately identify beginning and ending sounds in words, and subsequently develop the ability to segment sounds and understand how individual sounds make up a whole word.

The manner in which these activities are executed is important. Therefore, the reader will discover that some of the activities are written descriptively, with examples specified.

MATERIALS

Referent Program Cards for 21 sounds (included)

Referent Program Cards
/b/—The Ball Sound
/m/—The M-mm Good Sound
/p/—The Popping Sound
/w/—The Blowing Sound
/d/—The Drum Sound
/n/—The Nose Sound
/t/—The Tick-Tock Sound
/f/—The Firecracker Sound
/v/—The Motor Boat Sound
/k/—The Cuckoo Clock Sound
/h/—The Laughing Sound
/g/—The Baby Sound
/y/—The Yoyo Sound
/l/—The Singing Lady Sound
/th/—The Thumbelina Sound
/r/—The Growling Dog Sound
/s/—The Sammy Snake Sound
/ch/—The Choo Choo Train Sound
/z/—The Buzzing Bee Sound
/j/—The Jet Sound
/sh/—The Quiet Sound

Articulation picture cards—initial, final, and medial positions for all target sounds (clinician provided)

WORKING PRINCIPLES FOR SUCCESS

1. The clinician's manner should reflect enthusiasm and exuberance. The way in which these activities are executed is important.

2. Positive reinforcement and praise should be provided from the start. The focus of attention should be on the child's successes; do not focus on the child's errors. Since these activities involve limited production work, misarticulation will occur only when the child voluntarily attempts production. When that happens, make a positive comment, such as "Good try!" or "That's close!" and then provide the appropriate model for the child. In the end, the child should feel a sense of pride and will continue to make attempts independently. If the child's attempt is successful, the clinician should provide enthusiastic positive reinforcement.

3. The child's ability to attend auditorily and visually needs to be enhanced from session to session. The child must be taught to both listen and watch while the clinician teaches. If the child is not paying attention, do not proceed. Continue to present the sound until eye contact is made. The child's level of attention is largely dependent upon the clinician's manner of presentation. If these activities are fun, the child will easily learn to listen and look. Reinforcement of those skills, when observed, is crucial. The clinician can say: "I like the way you're watching my mouth. I guess I'm not going to be able to trick you."

4. Repetition is both necessary and effective for teaching the underlying concepts involved in the activities, particularly those in Group I. Repetition will help the child remember the referent name and the sound it represents and will also help the child understand the concept of beginning sounds.

5. Modeling should be exercised as often as is possible and natural, particularly once the child starts to grasp the idea of referents. For example, the child may have already learned the *Firecracker Sound* referent. One day the child comes to therapy and talks about having just had a fourth birthday. Although the child may misarticulate /f/ when saying "four," use this opportunity to model it by saying: "You just turned ffffour [prolonged /f/, not repetitive] years old! Hey, guess what? I hear the *Firecracker Sound* . . . ffffour . . . You're ffffour years old now. Do you hear it? I hear the *Firecracker Sound* right at the beginning of that word . . . ffffour. How about that!" The clinician may then go on to discuss the birthday in a natural conversational manner: "Did you have a birthday party?"

6. A pragmatic orientation is essential. Make the activity more meaningful to the child whenever possible. Never use a word that is not part of the child's vocabulary, unless planning to teach the meaning of that word simultaneously. It is best to concentrate on key words with which the child is familiar (such as the child's own name or names of family members, body parts, clothing, or other items in the immediate vicinity).

7. Taking cues from the child is crucial. When the child makes a few successful attempts to produce a particular sound or to think of a word that begins with a particular sound, provide a great deal of enthusiastic reinforcement and praise. Then begin to assess informally the child's progress with that sound. If the child can now easily produce the sound in words (even if only in one position), begin to incorporate production work (Group IV activities) on the sound into therapy.

8. The terminology which the clinician uses with the child is very important. Stay away from such terms as *wrong, right, incorrect, correct, bad, good.* Rather, use such terms as *old* and *new.* Once the child has reached the point of production work and successfully articulates a word, say: "Very good. You said that the *new* way! Good job!" If the child errs, say: "Good try, but I think that was the *old* way. Let's try it again and see if we can say it the new way." During auditory training activities (negative practice), ask the child to identify whether the sound or word is being produced the *old* way

or the *new* way. Such terminology lacks the negative connotations associated with words such as *wrong, bad,* and *incorrect.* It seems to have a much healthier psychological effect on the child.

9. Multi-sensory cues should be provided whenever the opportunity arises. These activities should not emphasize hearing to the exclusion of the other senses. Encouraging the child to watch the clinician's mouth takes advantage of the child's visual capacity for learning. Clinicians can provide tactile cues as well by placing their fingers on their own throat while introducing velar sounds or on their lips while introducing bilabials.

10. Task analysis and clinical judgment are crucial, as they are with any therapeutic approach. Never proceed with a task that a child is obviously unable to handle just because it is the next activity listed. Task analysis should be inherent at all times. If the child is not succeeding, the clinician should find the level and pace at which the child can succeed.

ACTIVITIES

Group I:
Introductory Auditory Training Activities

There are four major introductory activities, listed in hierarchical sequence, outlined in Group I. They should be presented to the child in the order in which they appear.

Activity 1

Introduce the referent program cards. Review all referents and the associated sounds for sounds in error and substituted sounds. That is, if the child correctly produces the /t/ sound, but substitutes /t/ for /s/, present the referents for both /t/ and /s/. (See specific instructions below for presentation of sounds.) Depending on the child, present four or more sounds per session until all sounds have been introduced. Use appropriate facial expression and vocal intonation as each sound is presented. Be sure to simultaneously teach the child to use eyes and ears by saying: "Listen very carefully and watch my mouth." (Say this as often as necessary.) Try to make the referents as meaningful to the child as possible; the specific instructions below explain how.

It is important to remember that as the referents are presented, there is no need to require the child to say the sounds. However, the child will often automatically say a sound when it is presented. Reinforce the child's initiative by saying: "That's right. You're making the *Ball Sound,* b-b-b-b-b. Good work!" If the child tries making the sound but produces it incorrectly, say: "Good try!" or "That's close!" and then correctly repeat the referent name and sound.

Specific Instructions for Presentation of Sounds. Using the referent program cards as stimulus pictures, present the target sounds in the following manner:

/b/—"This is the *Ball Sound,* b-b-b-b-b; the *Ball Sound,* b-b-b-b-b."

/m/—"This is the *M-mm Good Sound,* mmmmm; the *M-mm Good Sound,* mmmmm. She looks like she's going to eat something yummy! She's saying it's M-mm good! That's why we call it the *M-mm Good Sound,* mmmmm."

/p/—"This is the *Popping Sound,* p-p-p-p-p; the *Popping Sound,* p-p-p-p-p. See that balloon popping? It goes pop, p-p-p-p-p, the *Popping Sound.*"

/w/—"This is the *Blowing Sound,* wwwww; the *Blowing Sound,* wwwww. See the man blowing up the balloon? He's making the *Blowing Sound,* wwwww."

/d/—"This is the *Drum Sound,* d-d-d-d-d; the *Drum Sound,* d-d-d-d-d."

/n/—The clinician touches the side of the nose and says: "This is the *Nose Sound,* nnnnn; the *Nose Sound,* nnnnn. You can feel your nose move when you make the *Nose Sound,* nnnnn."

/t/—"This is the *Tick-Tock Sound,* t-t-t-t-t; the *Tick-Tock Sound,* t-t-t-t-t." A watch is held up to the clinician's ear and then the child's ear. Say: "We can listen to my watch make the *Tick-Tock Sound,* t-t-t-t-t."

/f/—"This is the *Firecracker Sound,* fffff; the *Firecracker Sound,* fffff. That's what a firecracker sounds like, fffff."

/v/—"This is the *Motor Boat Sound,* vvvvv; the *Motor Boat Sound,* vvvvv. Doesn't that sound just like a motor boat? Vvvvvv."

/k/—"This is the *Cuckoo Clock Sound,* k-k-k-k-k; the *Cuckoo Clock Sound,* k-k-k-k-k. When that birdie comes out of the clock, it says cuckoo, cuckoo—the *Cuckoo Clock Sound,* k-k-k-k-k."

/h/—"This is the *Laughing Sound,* ha-ha-ha; the *Laughing Sound,* ha-ha-ha. This is the sound we make when we laugh, ha-ha-ha."

/g/—"This is the *Baby Sound,* g-g-g-g-g; the *Baby Sound,* g-g-g-g-g. Did you make that sound when you were a little baby? G-g-g-g-g."

/y/—"This is the *Yoyo Sound,* y-y-y-y-y; the *Yoyo Sound,* y-y-y-y-y."

/l/—"This is the *Singing Lady Sound,* la-la-la-la-la; the *Singing Lady Sound,* la-la-la-la-la. See the lady singing? La-la-la-la-la, the *Singing Lady Sound.*"

/th/—Hold up a thumb and say: "This is the *Thumbelina Sound,* thththththh; the *Thumbelina Sound,* thththththh."

/r/—Demonstrate an angry face when producing "rrrrr." Say: "This is the *Growling Dog Sound,* rrrrr; the *Growling Dog Sound,* rrrrr. Doesn't that dog look angry? It's growling! Rrrrr, the *Growling Dog Sound.*"

/s/—"This is the *Sammy Snake Sound,* sssss; the *Sammy Snake Sound,* sssss. This is the sound a snake makes, isn't it? Sssss, the *Sammy Snake Sound.*"

/ch/—"This is the *Choo Choo Train Sound,* ch-ch-ch-ch-ch; the *Choo Choo Train Sound,* ch-ch-ch-ch-ch. That's just what the train sounds like when it goes down the track, ch-ch-ch-ch-ch."

/z/—"This is the *Buzzing Bee Sound,* zzzzz; the *Buzzing Bee Sound,* zzzzz. Doesn't that sound just like a bee? Zzzzz."

/j/—"This is the *Jet Sound,* j-j-j-j-j; the *Jet Sound,* j-j-j-j-j."

/sh/—Hold finger to mouth and say "shshsh." Tell the child: "This is the *Quiet Sound,* shshshshsh; the *Quiet Sound,* shshshshsh. That's what you say to people when you want them to be quiet, shshshshsh. That's why we call it the *Quiet Sound!*"

Note: There are certain referents which children tend to remember easily. These include the *Sammy Snake Sound, Singing Lady Sound, Quiet Sound, Choo Choo Train Sound, Buzzing Bee Sound, Growling Dog Sound,* and *Motor Boat Sound.* It may be helpful to keep this information in mind for planning purposes.

Activity 2

Teach the concept of beginning sounds in the following manner:

a. Choose a target sound and present the referent program card. For example, show the *Ball Sound* referent program card and say: "This is the *Ball Sound,* b-b-b-b-b." Have initial /b/ pictures ready and say: "We're going to look at some pictures of things that start with the *Ball Sound.* All of these pictures have the *Ball Sound* right at the beginning. It's the

first sound every time. Listen to me and watch my mouth as I say the names of these pictures. They all start with the *Ball Sound.* Here we go: bat, b-b-bat. Do you hear the *Ball Sound?* It's the first sound in this word. You'll hear it right away when I say the word: bat, b-bat. That word starts with the *Ball Sound!*"

Spend as much time as needed to teach the concept of beginning sounds. Be very repetitive if the child is having a difficult time grasping the concept. With repetition, even the younger or slower child will eventually internalize the concept (particularly since referent names and picture cues are used rather than letter names).

Present the next picture: "Bike, b-b-bike. Do you hear the *Ball Sound* again? It's the first sound—bike, b-bike. That word starts with the *Ball Sound.* Here's another one that starts with the *Ball Sound:* ball, b-b-ball. That has the *Ball Sound* right at the beginning too! It starts with the *Ball Sound;* do you hear it? Ball, b-ball. Listen to the next one and remember to watch my mouth, too! Boot, b-b-boot. That starts with the *Ball Sound.* It's the first sound in that word. Boot, b-boot."

Continue presenting the rest of the initial /b/ pictures in a similar fashion. Be repetitive while saying the referent name and associated sound for each picture. Once all the initial /b/ pictures are presented in this manner, say: "All of those words started with the *Ball Sound* [show the picture as each word is reviewed]: bat, bike, ball, boot, banana, belt, boat. They all have the *Ball Sound* right at the beginning. You were a good listener!"

b. At this time, attempt to make the *Ball Sound* (or the target sound chosen) more meaningful (refer to the Appendix) by identifying body parts, clothing or other items in the immediate surroundings which start with the *Ball Sound.* The manner in which this is executed is important. The clinician may say: "Let's see if I can find some things in this room that start with the *Ball Sound.*" Look around quizzically and say: "Oh, my goodness! I see something right here in front of me." Point in the direction of the child's stomach and say: "Belly! That starts with the *Ball Sound!* B-b-belly, belly. How about that! [Pause.] Oh, I see something else too! It's your back. [Point to it.] B-b-back, that starts with the *Ball Sound* too! Let me see . . . what else . . . why this button right here on your shirt . . . b-button, button. Do you hear it again? I do! I hear

the *Ball Sound* right at the beginning of that word—button. I don't know if I can find anything else. I already found three things that start with the *Ball Sound* [point to each item as the word is said, emphasizing the /b/]: belly, back, button. Is there anything else that starts with the *Ball Sound*? Let me see . . . Hmm . . . Oh, I see something else! It's your belt, b-b-belt. How about that! I hear the *Ball Sound* again—belt! [Pause.] Why look here! Right on this very table I see something that starts with the *Ball Sound.* If the child should guess correctly, offer praise excitedly. If the child doesn't venture a guess, say: "It's this book, b-b-book. I hear the *Ball Sound* in that word—book. There sure are lots of things that start with the *Ball Sound!*"

It is important to make this approach exciting and fun for the child. This sets an example for the child who will, at a later date, try to identify items beginning with the appropriate sound. Children love to do this; inevitably the child will begin to look all around the room trying to associate an item with a beginning sound. This is a fantastic beginning for learning sound-symbol relationships. Always praise the child's efforts and give help as needed. When a child does succeed, the clinician's enthusiasm is important. Tell the child: "Wow! You found something all by yourself that starts with the *Ball Sound*—bell—good job! You sure are a smart little girl (or boy)!"

c. Choose a contrasting sound that does not have features in common with the *Ball Sound*, like the *Quiet Sound.* Present the referent program card and say: "Now we're going to talk about another sound. This is the *Quiet Sound*, shshshshsh." [Hold index finger to mouth while saying the sound.] Have initial /sh/ pictures ready and say: "Now we're going to look at some pictures of things that start with the *Quiet Sound.* Remember to listen carefully and watch my mouth every time. Here we go: shoe, shshshoe. Do you hear the *Quiet Sound?* Shshshoe—it's right at the beginning. It's the first sound in that word! Listen, shshshoe. I hear the *Quiet Sound* right at the beginning. Here's another word that starts with the *Quiet Sound:* ship, shshship. I hear it again! I hear the *Quiet Sound.* It's the first sound in that word—shshship. Do you hear it?"

Continue to present the remaining initial /sh/ pictures in this manner and then say: "All of those words started with the *Quiet Sound* [show the picture as the word is reviewed]: shoe,

ship, shadow, shampoo, sheep, shirt, shade. They all had the *Quiet Sound* right at the beginning."

d. Next, identify meaningful /sh/ items for the child, like shoe, shirt, shoulders, shorts. (See the Appendix for examples.) Follow the same procedure as outlined for the *Ball Sound* in Activity 2b.

Activity 3

Begin auditory discrimination activities with the two sounds presented thus far. Say to the child: "Now we're going to play a game with our *Quiet Sound* pictures and our *Ball Sound* pictures. I'm going to mix them together and see if you can tell me which sound you hear, the *Ball Sound* or the *Quiet Sound.* Place the referent program cards for the *Ball Sound* and the *Quiet Sound* in front of the child. Shuffle the initial /b/ and /sh/ pictures and say: "When you hear the *Ball Sound* right at the beginning of the word, you can put the card on the table in front of the *Ball Sound* picture. [Point to the appropriate place.] But if the word starts with the *Quiet Sound,* where do you think you're going to put the card? [Wait for response.] Right! You can put it on the table in front of the *Quiet Sound* picture. Okay, here we go! Remember to listen carefully and watch my mouth so you can figure out if you hear the *Quiet Sound* or the *Ball Sound.*" Present each picture and when a card is placed in the appropriate pile, praise the child. Rarely will a child have much difficulty with this discrimination activity. If a mistake is made, say to the child: "That was a good try. But listen again. I think I hear the *Quiet Sound* in this word. Listen . . . shshshoe. That starts with the *Quiet Sound.*"

If the child makes more than two or three mistakes, take a step backward and spend more time training for each sound individually. Then return to this discrimination activity at a later date.

Activity 4

Continue auditory discrimination activities with a variety of target sounds.

a. Choose another target sound and pair it with a sound that does not have common features, like /f/ and /l/. Present the referent program cards: the *Firecracker Sound* picture and the *Singing Lady Sound* picture. Proceed in the same manner

as with the first two sounds in Activity 2. Remember to be repetitive and enthusiastic. Frequently say the referent name and associated sound. Emphasize the concept of beginning sounds. Make it fun for the child. Once all of the initial /f/ pictures have been presented, review them as a group, review meaningful initial /f/ words, and then present the *Singing Lady Sound* in the same way. Play the discrimination game with the /f/ and /l/ initial pictures.

b. Continue to present two unlike sounds in the manner described above. Examples of contrasting sound pairs which differ by at least two, and often three, major features (manner, place, voicing) are listed below.

/b/ and /sh/	/f/ and /l/	/s/ and /g/
/h/ and /j/	/v/ and /k/	/p/ and /z/
/r/ and /th/	/t/ and /y/	/d/ and /w/
/ch/ and /m/ or /n/		

These are only examples of sound pairs; they may be paired differently. The order in which these sound pairs are presented is not important. They may be presented in random order or the presentation can be tailored to the individual child. The major objective is that the child learn the concept of beginning sounds and be able to make fairly gross speech sound discriminations.

Group II:
Basic Auditory Training Games and Activities

Once the child is familiar with all the referents presented and has successfully completed the previously outlined discrimination activities, use creativity and imagination to continue auditory training activities on all phonemes in error. That will, in turn, facilitate the child's readiness for phoneme production. Examples of types of activities or games which will continue to foster general sound awareness follow. Unless otherwise specified, these activities may be presented in any order.

Activity 1

Display the referent program cards for all target sounds. The clinician produces one of the target sounds, and the child points to the corresponding referent program card (and may name the referent as well). Do this for each referent chosen.

Activity 2

If the child can easily produce most sounds in isolation, proceed with the following: Point to and name one of the referents and ask: "How do you make (for example) the *Motor Boat Sound?*" The child then produces the sound. Repeat this step for all referents selected for work. If the child cannot remember some of the sounds, immediately demonstrate the sound.

Activity 3

Reinforce language skills by playing a game which involves a particular sound referent. Choose a target sound referent and gather a set of pictures beginning with the referent. For example, tell the child that all the pictures you have begin with the *Singing Lady Sound.* The child has to guess what the pictures are by listening to clues, such as: "This is something that you can climb up" (the referent is *ladder*). Continue giving clues until the child is successful. In the end, review the names of all the pictures, emphasizing the *Singing Lady Sound.* Repeat the game with a variety of target sounds.

Activity 4

This activity is similar to Activity 3, except that one child gives the clues and the clinician or other children in the group do the guessing.

Activity 5

Present a referent program card for any target sound and ask the child to think of as many words as possible that begin with the sound. Repeat for a variety of target sounds. It is helpful and motivating to use positive reinforcement, such as giving the child a plastic counter for each word volunteered.

Activity 6

This activity, similar to activity 5, can reinforce language skills by making the word choices more restrictive. Present a referent program card for a target sound. Ask the child to name, for example, two foods or two animals that begin with the sound. If the child is stumped, provide descriptive hints.

Activity 7

If the child could easily cope with the discrimination activities involving two unlike sounds (Group I, Activity 4b), present the same discrimination activities for target sounds differing by only one feature (for example, /t/ and /s/, /k/ and /g/, /l/ and /v/). Thus, the child will be trained to make much finer speech sound discriminations.

Activity 8

This activity is similar to Activity 7. For contrast training, choose a target sound and pair it with the error sound. If, for example, the child substitutes /p/ for /f/ in the initial position, place the referent program cards for the *Popping Sound* and the *Firecracker Sound* on the table. Then give pictures of objects which begin with those sounds to the child. Ask the child to sort the pictures.

Activity 9

Give the child a referent program card to hold (like the *Choo Choo Train Sound*) and walk around the room helping the child search for things that start with that sound. Point to various items and say: "Chair, ch-ch-chair. Does that start with the *Choo Choo Train Sound?* [Wait for response.] Yes, it does! Good work! Desk, d-d-desk. Does that start with the *Choo Choo Train Sound?* No, it doesn't. Let's keep walking and see what we can find. Chalkboard, ch-chalkboard. Does that start with the *Choo Choo Train Sound?* Yes, it sure does—chalkboard." Proceed in this fashion. Do the same with different referent program cards. Positively reinforce all of the child's attempts at locating appropriate items.

Activity 10

This is the same as Activity 9, except using body parts.

Activity 11

Focus on one referent. Review it with the child: "Today we're going to listen for the *Sammy Snake Sound*. I'm going to say many words that start with the *Sammy Snake Sound*, and I want you to listen carefully. Here we go [show pictures or just present

words; emphasize the beginning /s/ sound in each word] sun, soup, sandwich, supper, seven, see, sad, song, sit, sell, soft, sand. Do you hear *Sammy Snake* in all of those words? Yes, I do too. Now I'm going to say some more words. Sometimes you'll hear *Sammy Snake* at the beginning but sometimes you won't. Sometimes you'll hear a different sound. I want you to say 'yes' [or point to the *Sammy Snake* referent card] when you hear *Sammy Snake*. If you don't hear *Sammy Snake*, say 'no.' Okay? Here we go [pause for appropriate response after each word; emphasize the initial sound of each word]: seven, sit, pail, soup, mummy, chair, sing." Use pictures for visual stimuli or just present words. If you use pictures, you can determine the winner by counting the pictures the child won as opposed to yours. To help the child stay on task, provide a reminder after every few words by saying "Do you hear the *Sammy Snake Sound* in this word?"

Activity 12

Choose four picture cards, three of which begin with the same sound and one that begins with a different sound. Ask the child to determine which card doesn't belong with the rest. Provide assistance and modeling as needed.

Activity 13

Choose a target sound in order to engage in negative practice. For example, if the child consistently substitutes /d/ for /sh/ in the prevocalic position, gather several initial /sh/ pictures and say to the child: "I have a bunch of *Quiet Sound* pictures here. All of these words start with the *Quiet Sound*. I want you to listen carefully and tell me if I say the *Quiet Sound* the new way or the old way. Okay? Here we go—shshoe . . . Was that the old way or the new way? Right! That was the *new* way. Let's listen to the next one—dampoo . . . Did I say that the old way or the new way? Good job. That was the *old* way." Continue this way for a variety of target sounds.

Activity 14

Present the referent program card for a particular sound and review the sound it represents. Hide objects (or pictures) around the room that begin with that referent and have the child hunt for

them. After all of the hidden objects are found, review the names of the objects, emphasizing the beginning sound. Repeat the procedure using other target sounds.

Activity 15

Make a poster for each of the target referents. With the child, look through magazines for pictures of common items that begin with target referents. Have the child cut out the pictures and paste them to the appropriate posters. Model sounds and provide auditory training while looking through the magazines.

Activity 16

Choose three or four referents. Take several pictures of common items beginning with each of the referents and mix them together. (For example, use /k/, /sh/, /l/, and /z/, with five to ten examples of each.) Place the appropriate referent program cards on the table. Show the pictures one at a time to the child. Name each item, emphasizing the initial sound, and ask the child to identify the initial referent and place the picture on the appropriate referent program card.

Initially, introduce and explain this activity. The clinician could say: "We're going to play a game with some of our sounds. I have a bunch of pictures here and some of them start with the *Cuckoo Clock Sound,* some of them start with the *Quiet Sound,* some of them start with the *Singing Lady Sound,* and some of them start with the *Buzzing Bee Sound.* I'm going to mix them all up and see if you can tell me which sound you hear right at the beginning of each word."

Of course, as with any therapeutic activity, task analysis is very important. If this task seems too difficult for the child, break down the task to make it simpler. Find the level at which the child can succeed. Give the child several examples. Present a picture and say: "Lllamb, llllamb. I hear the *Singing Lady Sound* at the beginning of that word, llllamb. Do you hear it?" Present the next picture and say: "Shshship, shshship. I hear the *Quiet Sound* in that word. Listen . . . shshship, that starts with the *Quiet Sound.*" Proceed to give examples of initial /k/ and /z/ pictures. Then have the child independently identify the rest of the beginning sounds. If the task is still too difficult, try reviewing the pictures. Present all of the initial /k/ pictures to the child and say: "All of these words start with the *Cuckoo Clock Sound.*" Then name each

word, emphasizing the beginning /k/ sound. Present the /sh/ pictures as a group, then the /l/ pictures, and finally the /z/ pictures in the same fashion. With such an organized auditory training introduction, the child may then be able to discriminate the initial sounds. If not, choose only three sounds, or go back to two sounds.

On the other hand, if this task is easy for the child, gradually add more and more referents to the mixed group of pictures. Continue adding referents until all referents that need to be addressed are included. Thus, as the child progresses with this task, pictures for as many as fifteen to twenty sounds may be presented. The child can place all of the correctly identified pictures in a pile. Incorrectly identified pictures can go in a pile in front of the clinician. At the end of the activity, the child and clinician can count each pile to determine the winner (the child, of course). Having a pile of thirty-seven pictures while the clinician has only three will thrill the child!

That particular game is one that can be played with the child regularly. Minor aspects of the procedure may be varied so that it is not exactly the same game every time, but the discrimination skill involved remains the same.

Group III: Advanced Auditory Training Games and Activities

Once the activities in Group II become easy and the child is in the process of developing a sharp awareness of sounds, continue with additional auditory training at a more advanced level. The following activities may be presented in any order unless otherwise specified.

Activity 1

Choose a referent program card (such as the *Sammy Snake Sound*) and present it to the child. Explain to the child: "We've learned lots of words that start with the *Sammy Snake Sound*, haven't we? [Emphasize the initial /s/ while saying several /s/ words.] Sun, supper, sandwich, soup, seven, song, sailboat—all those words start with *Sammy Snake*. Now we're going to learn about words that have the *Sammy Snake Sound* at the end. They don't start with *Sammy Snake*, but you'll hear the *Sammy Snake*

Sound at the end of the word—it will be the last sound in the word." Have final /s/ pictures ready and present them one at a time, emphasizing the final sound and continually reinforcing the concept of final sounds. Spend as much time as necessary to teach the concept by presenting additional referents in the final position. Once a deck of final /s/ pictures has been presented, choose another referent program card. Say: "Now let's listen to some words that end with the *Baby Sound*. Do you remember the *Baby Sound?* G-g-g-g-g. We're going to hear that sound right at the end of all of these words." Have final /g/ pictures ready and present them in the same manner as /s/. Continue with additional target referents. This is purely an auditory training listening activity.

Activity 2

Once an adequate amount of time has been spent on Activity 1, begin discrimination activities with final sounds. Choose two unlike sounds (refer to sample list of contrasting sound pairs on page 17) or choose target/error sounds (if the child is ready), and present the referent program cards for each. Proceed in the same manner as with initial sound discrimination. For example, present the referent program card for /s/ (the *Sammy Snake Sound*) and say: "Let's look at some pictures of things that have the *Sammy Snake Sound* right at the end. Listen to me and watch my mouth as I name these pictures. They all end with the *Sammy Snake Sound*. Here we go [show each picture and emphasize final /s/]: house, bus, horse, face." After each word or two (or three), say: "Do you hear *Sammy Snake* at the end?" Repetition, saying the referent name and associated sound often, remains important in teaching the concept of final sounds.

Once the final /s/ pictures are presented, show the *Baby Sound* referent program card and say: "Now we are going to look at some pictures of things that end with the *Baby Sound*. Remember to listen carefully and watch my mouth every time. The *Baby Sound* will be at the end of every word. It will be the last sound you hear. Ready? Bug, bug. Do you hear the *Baby Sound* at the end? Yes, I do too. Here's another one: wig, wig . . . pig, dog." Once that exercise is completed, review the fact that the child listened to words that ended with the *Sammy Snake Sound* and words that ended with the *Baby Sound*.

Then say: "Now let's play a game and see if you can tell me which sound you hear at the end. I'm going to mix my ending *Baby*

Sounds and my ending *Sammy Snake Sounds.* You tell me which sound you hear at the end." Proceed as outlined for initial sounds. If the child succeeds with this final sound discrimination task, continue to present two additional sounds at a time for extended final sound discrimination practice.

Activity 3

Refer to Activity 11 in Group II. Shift the focus to final sounds.

Activity 4

Refer to Activity 12 in Group II. Shift the focus to final sounds.

Activity 5

Refer to Activity 16 in Group II. Shift the focus to final sounds. Mix together several pictures of common items ending with three or four different referents. The child will then need to be listening for final sounds rather than initial sounds. Reinforce the final sound concept as necessary. As explained in Activity 16 of Group II, task analysis is essential. Break down the task until the level at which the child can achieve is reached.

Activity 6

Introduce the concept of medial sounds by telling the child: "We know that all of our sounds are right at the beginning of lots of words, and all of our sounds are at the end of lots of words, too. Well, guess what? Sometimes our sounds are right smack in the middle of words. Let's listen to some words and see if we can hear some sounds in the middle." Present a referent program card like the *Choo Choo Train Sound.* Have medial /ch/ pictures ready.

Say to the child: "Do you remember the *Choo Choo Train Sound?* Sometimes words start with the *Choo Choo Train Sound,* like chair, chin, cheek, chalk. Remember those words that start with the *Choo Choo Train Sound?* Good. And remember we talked about words that end with the *Choo Choo Train Sound,* like couch, witch, patch. Now let's look at some pictures of things that have the *Choo Choo Train Sound* in the middle—not first, and not last—but right in the middle." Present each picture. As each word is said, point to mouth as the medial /ch/ sound is articulated. Say: "Matches, match-ches. Do you

hear the *Choo Choo Train Sound* right in the middle? I do too. It doesn't start with *Choo Choo Train* and it doesn't end with *Choo Choo Train;* that *Choo Choo Train Sound* is right in the middle!—matches." Continue to present a few medial /ch/ pictures in this fashion. The clinician may do this with other medial sounds as well, but it is not necessary to engage in discrimination activities. The purpose of this listening activity is to let the child know that sounds can occur in the middle of a word.

Activity 7

Mix pictures which begin with a particular sound with additional pictures which end with the same sound. The child then has to identify the position of the sound. For example, present the referent program card for the *Buzzing Bee Sound* and review the sound: "Sometimes the *Buzzing Bee Sound* is right at the beginning of a word and sometimes it is at the end of a word. I want you to listen to me name these pictures, and you tell me where you hear the *Buzzing Bee Sound*—first or last." (Use whatever terminology is familiar to the child.) Present pictures for a variety of target sounds.

Activity 8

This activity is similar to Activity 7, but incorporates medial pictures as well. The child has to identify whether the sound is first, last, or in the middle. This may be difficult for some children. A test/teach or task analysis approach is necessary. Good clinical judgment is necessary as well. This activity is probably not appropriate for a three-year-old child, but may be fine for a child of five.

Activity 9

Auditory training and discrimination at the phrase or sentence level can be incorporated once the child is competent at the word level. Choose a target sound and present the referent program card (for example, the *Growling Dog Sound*). Compile several initial /r/ pictures and tell the child: "All of these pictures start with the *Growling Dog Sound.* I'm going to tell you something about each of these pictures, and you have to tell me if I say the name of the picture the old way or the new way. Are you ready?" Present the first picture (for example, a raincoat) and say: "Yellow

raincoat . . . Did I say that *Growling Dog* word the old way or the new way? That's right! I said it the *new* way. Okay, let's listen to the next one." Present the next picture (for example, a rope) and say: "Long wope . . . Was that the old way or the new way? Good listening! That was the old way." Continue with the remaining initial /r/ pictures.

Once the phrase level is easy for the child, proceed to the sentence level. For example, say to the child: "I'm going to make up a whole sentence for each of these pictures. You listen for this *Growling Dog* word [point to the picture] in my sentence and tell me if I say it the old way or the new way. Okay, here we go." Present the picture (for example, *rain*) and say naturally: "It is raining. Did I say that *Growling Dog* word the old way or the new way? Right! That was the *new* way." Continue to develop short sentences for initial /r/ pictures and produce /r/ correctly most of the time; occasionally interject "the old way." This phrase and sentence level auditory training can be used for any of the target sounds.

Activity 10

Choose a group of pictures that begin and end with a variety of target sounds. Present each picture and ask the child to identify the beginning sound referent and the ending sound referent.

Activity 11

Make a list of all the significant people in the child's life: family members, teachers, friends, relatives (pets, too). Select the names that begin or end with any of the target sounds and present them to the child. Ask the child to identify the beginning or ending sound referents.

Activity 12

Self-discrimination often begins to occur spontaneously as the child becomes increasingly aware of speech sounds. However, for a self-discrimination activity, select a target sound that the child can produce correctly at least some of the time. For example, compile a set of initial /f/ pictures and name each picture for the child, emphasizing the /f/ sound. Then have the child name each picture. After the picture is named, ask the child

whether that was the old way or the new way of saying the *Firecracker Sound.* Do this for a variety of target sounds on which the child is stimulable.

Activity 13

By using referents, phoneme segmentation activities and rhyming activities are very easy to do with young children. Select a picture of a simple word, such as *cat.* The child will know that the word begins with the *Cuckoo Clock Sound.* Present several additional referent program cards. Substitute those sounds for the *Cuckoo Clock Sound* to make new words (for example: the *Firecracker Sound*—fat, the *Growling Dog Sound*—rat, the *Sammy Snake Sound*—sat).

Group IV:
Production Training Ideas

Production work is not necessary during the activities listed in Groups I, II, and III. However, when the child successfully and independently attempts sound production, the child is demonstrating readiness for production work on that particular sound or sound group. Provide enthusiastic praise and reinforcement for the child's attempts, and then incorporate production work at the word level on those sounds. Remember to use the terms *old way* and *new way* throughout production activities. When the child misarticulates, make light of the error and say: "Good try, but I think that was the *old* way. Let's see if we can say it the *new* way."

Activity 1

Once the child demonstrates readiness for production work, make a "Speech Book" for the child. Any type of notebook can be used. Use the sound referents the child has learned so well to help make the speech book meaningful to the child.

a. If the child is demonstrating readiness for /l/ production (for example), make a copy of the *Singing Lady* referent program card, and tape it into the child's speech book. Tape initial /l/ pictures into the book for home practice. Include final /l/ pictures and medial /l/ pictures when the child is ready.

b. When the child is ready for phrase work, use the pictures to develop a rebus of phrases to include in the speech book. Add simple adjectives for phrase work. If some of the initial /l/ pictures taped into the Speech Book are *lamb, lady, lips, legs, ladder, lamp,* have the child:

color the lips red and the lamb white
to practice the phrases *red lips* and *white lamb*

draw a tall lady next to the picture of the shorter lady
in order to practice the phrases *short lady* and *tall lady*

draw a stick figure on the ladder
to practice the phrase *climb the ladder*

write the words *two* and *big* in front of the respective pictures *legs* and *lamp* in order to practice the phrases *two legs* and *big lamp*

Despite the fact that they may be non-readers, children will learn the printed words through rote memory as the phrases are practiced.

c. Once the child has progressed to the sentence level, printed words can also be incorporated into a rebus. Make additional copies of the original /l/ pictures and tape them into the speech book. For example:

The is nice.

I have 2 .

The is broken.

For any sound the child is able to produce easily, this type of word, phrase, and sentence work may be included in the speech book. Present the speech book to the child with enthusiasm and exuberance. Make the child really feel good about the work in the speech program and become proud of the speech book. The clinician could say to the child: "Today is really a special day. You've been doing such a good job with your sounds that I'm going to give you your very own speech book!" Present the speech book to the child and say: "This is going to be your speech book. I'm going to write your name right on the cover of it, so everyone will know it belongs to

you. We're going to put lots of our work in your speech book so that you can take it home and show everyone what you've been learning. We'll put a little bit in your book every time you come to speech class. Before you know it, your whole book will be filled!"

It is rare to find a child who does not become excited about having a speech book when it is presented in such a manner. Children are usually quite proud of the book and cannot wait to bring it home in order to practice in front of their family. Since there will never be any material in the speech book that the child cannot produce easily, there is less need to worry about the parents' method of interaction or reinforcement. Parents should be advised to help review the work in the speech book only if the child is interested in doing so. The child should never be forced to practice. In most instances, if dealt with properly, the child will want to practice daily.

Activity 2

Another way to use the speech book idea with many children (particularly three- and four-year-olds) is a monosyllabic whole word approach—training all sounds in error in initial and final positions simultaneously.

a. Enthusiastically present the speech book to the child. Look through old magazines with the child for pictures of common items that begin and end with target consonant sounds and are only one syllable in length. The child can paste the pictures in the speech book, one picture on a page. Write the word at the top of the page and underline the beginning and ending sounds. Review the initial and final referents for each word or have the child figure it out. (For example, the child should be able to say that *sun* starts with the *Sammy Snake Sound* and ends with the *Nose Sound.*) Provide whatever help is needed. The task then is, simply, to have the child name each picture.

   Because a variety of sounds are represented in these whole words, the child will get simultaneous practice on all error sounds. Whenever the child errs, point out the referent that was forgotten or said "the old way." For example, if the child says *no* when naming *nose*, say: "Nose. I hear the *Buzzing Bee Sound* at the end of that word. Nose. I think you forgot about that poor *Buzzing Bee*. Let me hear you say it with

Buzzing Bee at the end." If the child says *peet* for *feet*, say: "That word starts with the *Firecracker Sound*—feet. Can you make the *Firecracker Sound* at the beginning of that word?"

If the child is not easily stimulable at the word level, such production work is not appropriate. Include only whole words which have sounds the child can produce without much difficulty. If the child is not at all stimulable on a specific sound, then auditory training should remain the focus for that sound. Add pictures to the speech book as progress is made.

b. Once the child can cope with the word level without difficulty, continue to the phrase level. Using the words that are in the child's book, the clinician and the child can develop phrases for each word. Ask the child to say something about the picture, and write the phrase below the word. Children tend to remember self-made phrases more easily than clinician-made phrases. Thus, even a child who is a non-reader will tend to "read" or remember the phrases as each page in the book is reviewed. (Examples of simple phrases: *fat pig, my Daddy's car, boat in the water, two feet, dog barking, black cat.*)

c. Once the child can easily handle the phrase level, sentences can be developed for each of the key words in the book.

d. Help the child develop a short story for each key word. Use the key word frequently in the story. However, the clinician may discover that going beyond the sentence level with this approach is not needed. As a result of the intensive auditory training activities, carryover may occur automatically.

Activity 3

Traditional therapy beginning at the whole word level may also be conducted.

a. Present a referent program card for a target sound, plus a set of pictures having the target sound in the initial position. Have the child name each picture the new way. Provide positive reinforcement for correct use of the referent.

b. If the child is ready for it, do the same for the target sound in the final position.

c. *Optional exercise:* Do the same for the target sound in the medial position (if the child is ready for it).

d. Proceed in the same fashion for:

target words within phrases
target words within sentences
target words within paragraphs or short stories
target words within structured conversational speech
target words within spontaneous, automatic speech.

The child may progress from the word level to the carryover level without ever having focused on the levels in between. Because the child is so tuned in to the sound and independently begins to produce it correctly in words, carryover may occur spontaneously.

REFERENCES

Berry, M. F., and J. Eisenson. 1956. *Speech disorders: Principles and practices of therapy.* New York: Appleton-Century-Crofts.

Bernthal, J. E., and N. W. Bankson. 1981. *Articulation disorders.* Englewood Cliffs, NJ: Prentice Hall.

Eisenson, J. 1972. *Aphasia in children.* New York: Harper and Row.

Hodson, B., and E. Paden. 1983. *Targeting intelligible speech.* San Diego, CA: College Hill Press.

Holland, A. 1975. Language therapy for children: Some thoughts on context and content. *Journal of Speech and Hearing Disorders* 40:514-523.

Ingram, D. 1976. *Phonological disability in children.* New York: Elsevier North Holland.

McReynolds, L. V., and D. L. Engmann. 1975. *Distinctive feature analysis of misarticulations.* Baltimore, MD: University Park Press.

Monnin, L. M. 1984. Speech sound discrimination testing and training: Why? Why not? In *Treating articulation disorders for clinicians by clinicians,* edited by H. Winitz. Baltimore, MD: University Park Press.

Powers, M. H. 1971. Clinical and educational procedures in functional disorders of articulation. In *Handbook of speech pathology and audiology,* edited by L. E. Travis. Englewood Cliffs, NJ: Prentice Hall.

Snyder, L. S. 1980. Have we prepared the language disordered child for school? *Topics in Language Disorders* 1:29-45.

Travis, L. E. 1931. *Speech pathology.* New York: Appleton.

Van Riper, C. 1972. *Speech correction: Principles and methods.* Englewood Cliffs, NJ: Prentice Hall.

Winitz, H. ed. 1984. Auditory Considerations in Articulation Training. In *Treating articulation disorders for clinicians by clinicians.* Baltimore, MD: University Park Press.

APPENDIX

Meaningful Words

The following list gives examples of meaningful words for each sound. These are words with which the child is familiar (such as body parts, clothing, or items in the immediate environment.

/b/—belly, back, button, belt, barrette, boots, book, boy
/m/—mouth, mittens, man
/p/—pants, paper, pencil, pen
/w/—waist, white, woman, watch
/d/—dimple, dress, desk
/n/—nose, neck, knees
/t/—teeth, toes, tummy, tongue, table
/f/—face, fingers, foot, feet, forehead
/v/—voice, vest
/k/—coat, cup, crayons
/h/—head, hair, hands, hips, hanky, hat
/g/—gloves, girl, game, green
/y/—yellow, yawn
/l/—legs, lips, lady, light
/th/—thumb
/r/—wrist, ribbon, ring, red, rug
/s/—stomach, socks, sandals, skirt, scarf, sundress
/ch/—cheeks, chin, chair, chalk, chalkboard
/z/—zipper
/j/—jersey, jeans, jacket
/sh/—shoulders, shoes, shirt, shorts

Popular resources for articulation therapy . . .

TAKE HOME GAMES: Motivational Activities for Articulation Carryover (S, R, L) (1986)
by Debbie Harrison Wieser

Your students can achieve carryover more quickly through these enjoyable home assignments. Each reproducible activity offers extensive articulation drill for /s/, /r/, and /l/, in all positions and blends. Plus, 192 picture cards for additional reinforcement. You'll find your students' favorite games creatively adapted for phoneme practice—tic-tac-toe, lotto, concentration, penny toss, and more.
Catalog No. 7012-Y $19.95

PLAYING CARDS FOR TEACHING /s/, /r/, and /l/ (1985)
by Harris Winitz, Ph.D.

Increase spontaneous use of target sounds in conversational speech through participation in familiar card games. Any standard card game can be played with these three card decks—one deck each for /s/, /r/, and /l/. The number and face cards have been given new names to include the target sound. A total of 162 cards for school-age and adult clients. **Catalog No. 7208-Y $19.95**

LEARNING CENTER ACTIVITIES FOR SPEECH THERAPY (1985)
by Signe Stitt

Here's a new way to make the most of your therapy time. By using learning centers, you can schedule more time for children with severe language and articulation problems but still serve students working on single phonemes. These students can work independently at one of the 23 learning centers you set up with the aid of this book. Includes reproducible pages and eight single sheets of full-color cut-outs. **Catalog No. 7274-Y $13.95**

DOUBLE TROUBLE (1984)
by Susan Housel, Debra Polson, and Nancy Herron

This ready-to-use drill material combines colorful illustrations and sentence clues for target sound practice. Students match pictures with clues—you elicit target phonemes. Two levels of drill sets are included. The primary level features early developing sounds. The intermediate level targets /s/, /z/, /r/, /sh/, /ch/, /j/, and /th/.
Catalog No. 7061-Y $19.95

Communication Skill Builders
3830 E. Bellevue/P.O. Box 42050
Tucson, Arizona 85733
(602) 323-7500

PAATCH: Program of Auditory Articulation Therapy for Children

Here's a new articulation program designed to remediate multiple articulation errors in young children. Use this collection of pragmatic auditory activities to train your clients to hear error sounds and prepare them for correct production of those sounds. These easy-to-use activities are grouped by difficulty level, from introductory to advanced.

You can adapt the auditory training games and activities to meet your individual therapy needs. They're enjoyable for you and your clients, in group or individual therapy.

Language Age and Interest Level: 3-6

Item #5775

ISBN 0-88450-982-6
Catalog No. 7366
Printed in the U.S.A.

Communication Skill Builders
3830 E. Bellevue/P.O. Box 42050
Tucson, Arizona 85733
(602) 323-7500

THE BALL SOUND

b-b-b-b-b

© 1987 by Communication Skill Builders, Inc.

Item #5776-1

THE POPPING SOUND

p-p-p-p-p

© 1987 by Communication Skill Builders, Inc.

Item #5776-2

THE NOSE SOUND

nnnnnnnn

© 1987 by Communication Skill Builders, Inc.

Item #5776-3

THE M-M-M-GOOD SOUND

mmmmmmmm

© 1987 by Communication Skill Builders, Inc.

Item #5776-4

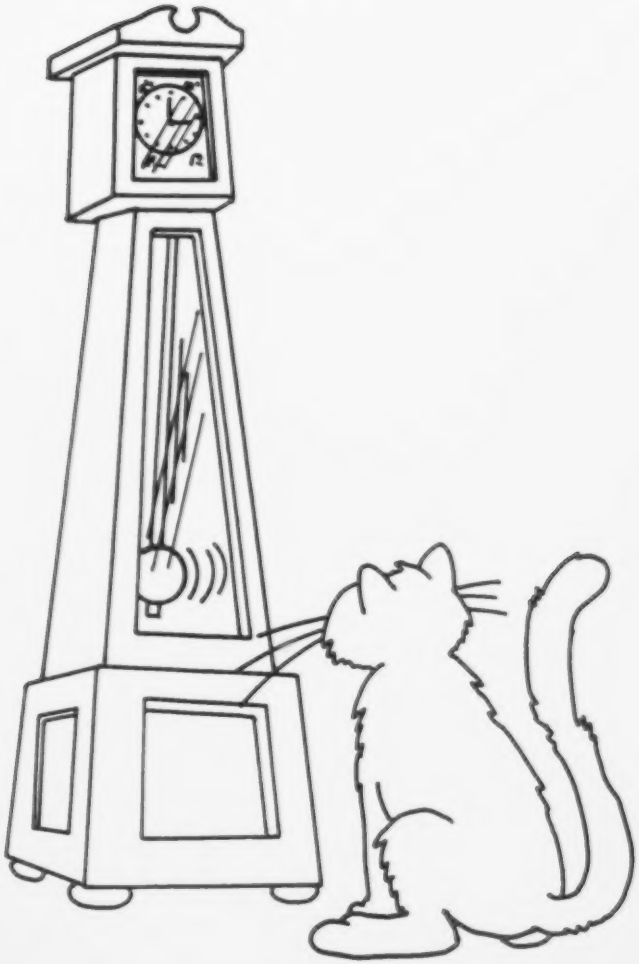
THE BLOWING SOUND

WWWWWWWW

© 1987 by Communication Skill Builders, Inc.

Item #5776-5

THE TICK-TOCK SOUND



t-t-t-t-t

© 1987 by Communication Skill Builders, Inc.

Item #5776-6

THE DRUM SOUND

d-d-d-d-d

© 1987 by Communication Skill Builders, Inc.

Item #5776-7

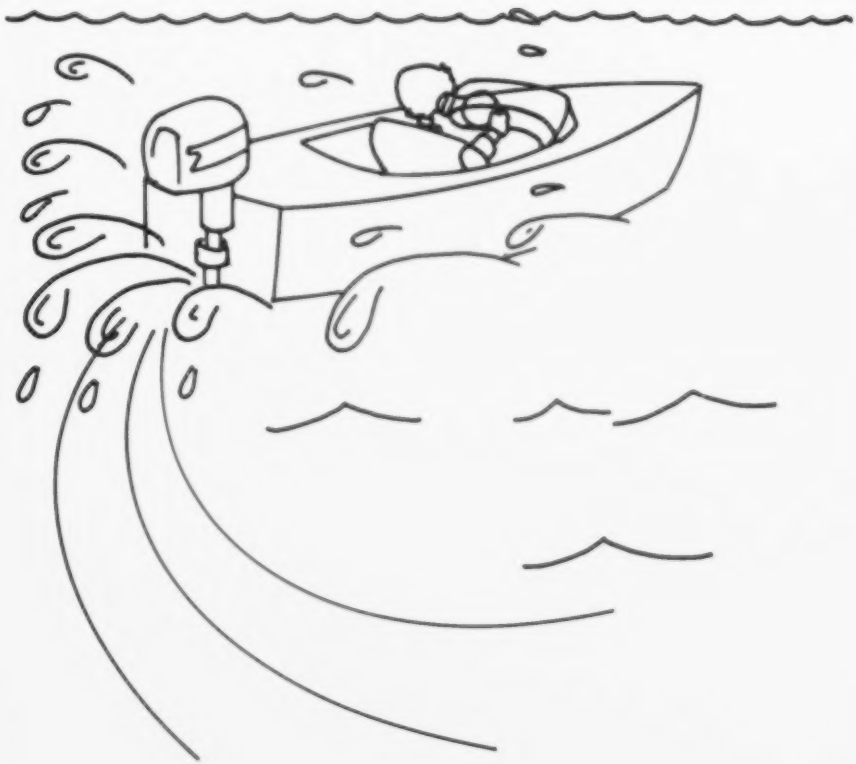
THE FIRECRACKER SOUND

ffffffff

© 1987 by Communication Skill Builders, Inc.

Item #5776-8

THE MOTORBOAT SOUND



VVVVVVV

© 1987 by Communication Skill Builders, Inc.

Item #5776-9

THE CUCKOO CLOCK SOUND

k-k-k-k-k

© 1987 by Communication Skill Builders, Inc.

Item #5776-10

THE BABY SOUND

g-g-g-g-g

© 1987 by Communication Skill Builders, Inc.

Item #5776-11

THE YO-YO SOUND

y-y-y-y-y

© 1987 by Communication Skill Builders, Inc.

Item #5776-12

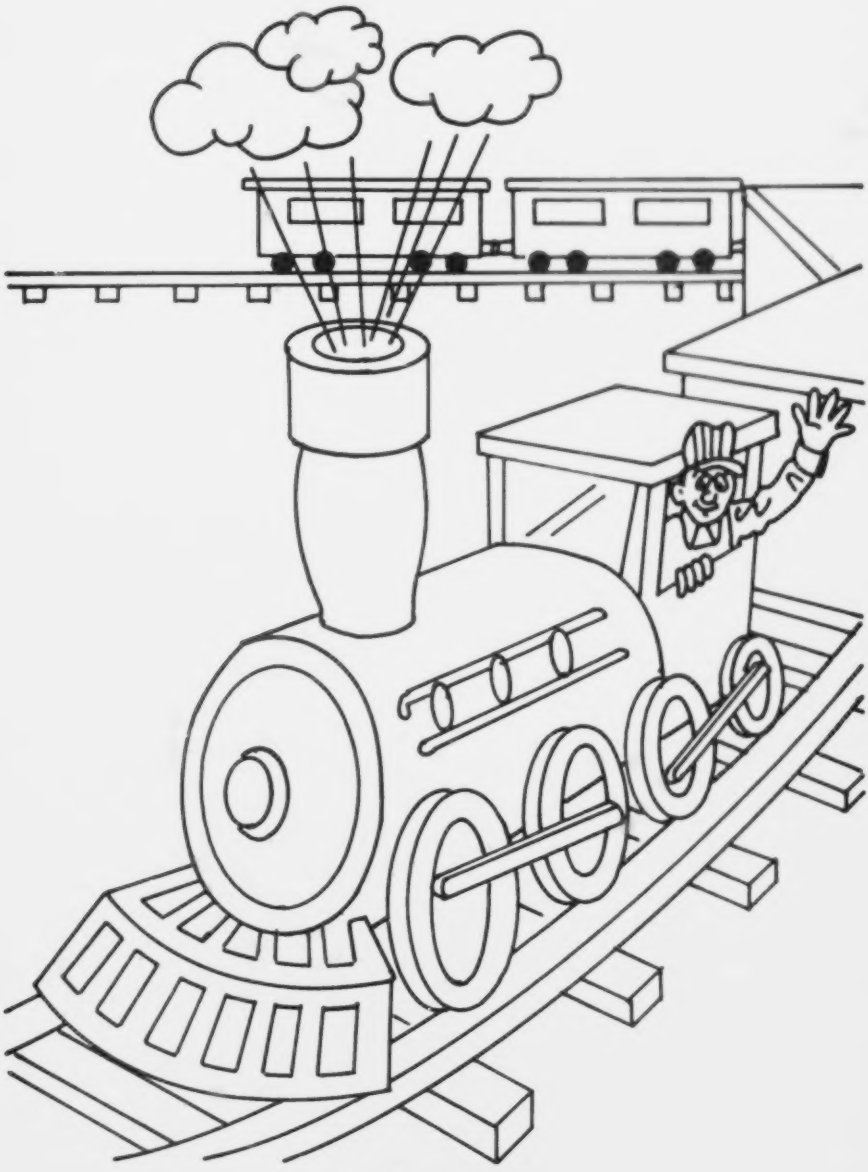
THE LAUGHING SOUND

ha-ha-ha-ha

© 1987 by Communication Skill Builders, Inc.

Item #5776-13

THE CHOO-CHOO TRAIN SOUND



ch-ch-ch-ch

© 1987 by Communication Skill Builders, Inc.

Item #5776-14

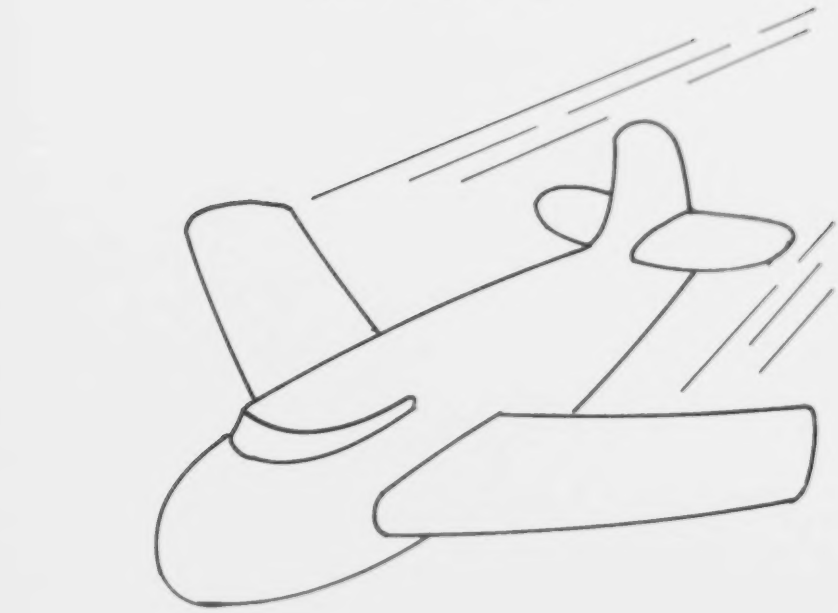
THE QUIET SOUND

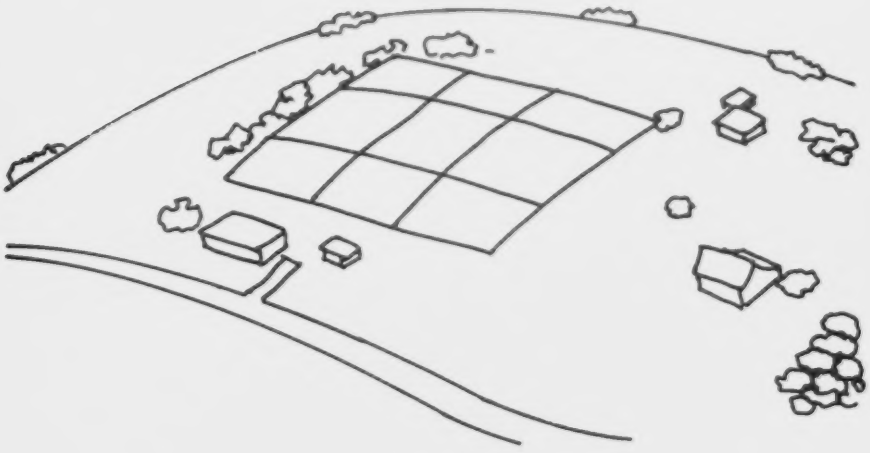
shshshshsh

© 1987 by Communication Skill Builders, Inc.

Item #5776-15

THE JET SOUND





j-j-j-j-j

© 1987 by Communication Skill Builders, Inc.

Item #5776-16

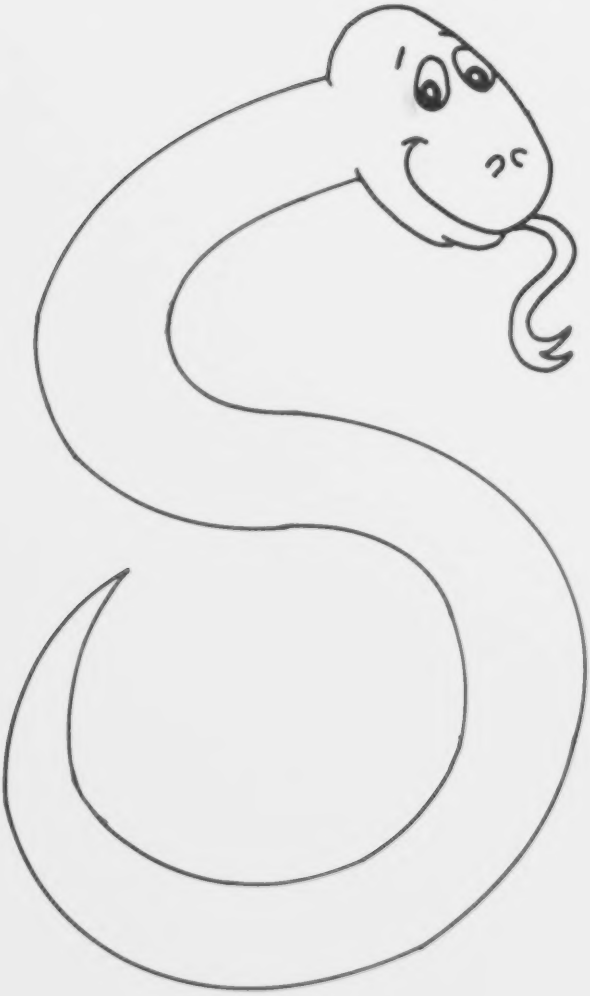
THE THUMBELINA SOUND

thththththth

© 1987 by Communication Skill Builders, Inc.

Item #5776-17

THE SAMMY SNAKE SOUND



SSSSSSSS

© 1987 by Communication Skill Builders, Inc.

Item #5776-18

THE BUZZING BEE SOUND

ZZZZZZZZ

© 1987 by Communication Skill Builders, Inc.

Item #5776-19

THE GROWLING DOG SOUND

rrrrrrrr

© 1987 by Communication Skill Builders, Inc.

Item #5776-20

THE SINGING LADY SOUND

la-la-la-la

© 1987 by Communication Skill Builders, Inc.

Item #5776-21